

CLAIMS:

1. An inkjet recording element comprising, in order, the following:
 - (a) a support having an upper surface made from a thermoplastic
5 polymer;
 - (b) a subbing layer, not more than about 1.5 μm thick, directly coated on the upper surface of the support and comprising, in a binder, particles of a synthetic, substantially amorphous aluminosilicate material, the synthetic, substantially amorphous aluminosilicate material having an average diameter of 1
10 to 10 nm, wherein the aluminosilicate material exhibits an X-ray diffraction pattern that comprises weak peaks at about 2.2 and 3.3 \AA ; and
 - (c) a non-porous ink-receiving layer, at least about 5 μm thick, comprising at least one hydrophilic binder.
- 15 2. The inkjet recording element of claim 1 wherein the binder comprises poly(vinyl alcohol).
3. The inkjet recording element of claim 1 wherein the ink-receiving layer further comprises a cationic polymer mordant.
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4. The inkjet recording element of claim 1 wherein the inkjet recording element further comprises a base layer located between the ink-receiving layer and the support.
- 25 5. The inkjet recording element of claim 1 wherein the inkjet recording element further comprises an overcoat layer.
- 6 The inkjet recording element of claim 1 wherein the synthetic, substantially amorphous aluminosilicate particles are substantially in the form of a
30 hollow sphere.

7. The inkjet recording element of claim 1 wherein the synthetic, substantially amorphous aluminosilicate material is a synthetic allophane with essentially no iron atoms.

5 8. The inkjet recording element of claim 1 wherein, in the subbing layer, the synthetic, substantially amorphous particles are present in the amount of about 2 to 20 weight percent and the binder is present in the amount of about 80 to 98 weight percent, based on the total solids in the subbing layer.

10 9. The inkjet recording element of claim 1 wherein the synthetic, substantially amorphous aluminosilicate material is a synthetic allophane having a positive charge.

15 10. The inkjet recording element of claim 1 wherein the synthetic, substantially amorphous particles comprise a polymeric aluminosilicate having the formula:



where the ratio of x:y is between 0.5 and 4, a and b are selected such that the rule of charge neutrality is obeyed; and n is between 0 and 10.

20 11. The inkjet recording element of claim 10 wherein the synthetic, substantially amorphous aluminosilicate comprises organic groups.

25 12. The inkjet recording element of claim 10 wherein the synthetic, substantially amorphous aluminosilicate has the formula:



where the ratio of x:y is between 1 and 3.6, and a and b are selected such that the rule of charge neutrality is obeyed; and n is between 0 and 10.

13. The inkjet recording element of claim 1 wherein the average particle size of the synthetic, substantially amorphous particles is in the range from about 3 nm to about 6 nm.

5 14. The inkjet recording element of claim 1 wherein the ink-receiving layer comprises organic polymers, including binder and optional mordant, in the amount of at least 80 weight percent based on total solids.

10 15. An inkjet printing method, comprising the steps of:
 A) providing an inkjet printer that is responsive to digital data signals;
 B) loading the printer with the inkjet recording element of Claim 1;
 C) loading the printer with an inkjet ink; and
15 D) printing on the inkjet recording element using the inkjet ink in response to the digital data signals.